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Tuesday, May 12th

10:00 - 12:30

PPS1: Plenary Poster Session I

Room: First Floor Gallery

Chairs: Luca De Vito (University of Sannio, Italy), Peter Händel (Royal Institute of Technology, Sweden), Mirko Marracci (University of Pisa, Italy), Fernando Rangel de Sousa (Federal University of Santa Catarina, Brazil), Simona Salicone (Politecnico di Milano, Italy), Stephen C Stubberud (Oakridge Technology, USA)

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Giuseppe Cavone (Polytechnic of Bari, Italy)

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Room: Auditorium

Chair: Emanuela Barzi (Fermi National Accelerator Laboratory, USA)

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Room: Room D

Chair: Alessandra Flammini (University of Brescia, Italy)

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James Aweya (Etisalat BT Innovation Centre and Khalifa University, UAE)

On the Use of Synchronous Ethernet Over Multiple Paths for Syntonization of Distributed Systems1543

Paolo Ferrari (University of Brescia, Italy)

Alessandra Flammini (University of Brescia, Italy)

Stefano Rinaldi (University of Brescia, Italy)

David Macii (University of Trento, Italy)

Daniele Fontanelli (University of Trento, Italy)

Assessment of Time Synchronization Quality in a Distributed PMU.....1549

Paolo Castello (University of Cagliari, Italy)

Paolo Ferrari (University of Brescia, Italy)

Alessandra Flammini (University of Brescia, Italy)

Carlo Muscas (University of Cagliari, Italy)

Paolo Attilio Pegoraro (University of Cagliari, Italy)

Stefano Rinaldi (University of Brescia, Italy)

Preserving Synchronization Accuracy in Slow Update Wireless Sensor Network Perturbed by Plug-in of Multi-Nodes.....1555

Francesco Lamonaca (University of Calabria, Italy)

Domenico Luca Carnì (University of Calabria, Italy)

Domenico Grimaldi (University of Calabria, Italy)

Maria Riccio (University of Sannio, Italy)

Alfonzo Nastro (University of Calabria, Italy)

16:50 - 18:30

T6-1: Measurement Applications

Room: Room E

Chair: Nicola Giaquinto (Politecnico di Bari, Italy)

Online Coupling System and Control Software for Reaction Monitoring Using Microreactors and ESI-MS....1561

Heidi Fleischer (University of Rostock, Germany)

Dany Hoffmann (University of Rostock, Germany)

Nwar Almahaini (University of Rostock, Germany)

Vinh Quang Do (University of Rostock, Germany)

Kerstin Thurow (University of Rostock, Germany)

Real-Time Velocity Profile Measurement in Two-Phase oil/gas Flow by Twin Plane Segmented ECT System1567

Elmy Johana Mohamad (Universiti Tun Hussien Onn Malaysia, Malaysia)
Ruzairi Abdul Rahim (Universiti Teknologi Malaysia, Malaysia)
Hanis Liyana Mohmad Ameran (Universiti Tun Hussein Onn Malaysia, Malaysia)
Omar Mohd Faizan Marwah (Universiti Tun Hussien Onn Malaysia, Malaysia)

Measurement of Flow Parameters in a Bubbling Fluidized Bed Using Electrostatic Sensor Arrays1573

Wenbiao Zhang (North China Electric Power University, P.R. China)
Yong Yan (University of Kent, United Kingdom)
Yongrong Yang (Zhejiang University, P.R. China)
Jingdai Wang (Zhejiang University, P.R. China)

Direct FPGA-based Power Profiling for a RISC Processor1578

Cosmin Cernazanu (Politehnica University of Timisoara, Romania)
Marius Marcu (Politehnica University of Timisoara, Romania)
Zheng Wang (RWTH-Aachen University, Germany)
Anupam Chattopadhyay (RWTH-Aachen University, Germany)
Stefan Fedecac (Politehnica University of Timisoara, Romania)
Madalin Ghenea (Politehnica University of Timisoara, Romania)
Jan H. Weinstock (RWTH-Aachen University, Germany)
Rainer Leupers (RWTH-Aachen University, Germany)
Alexandru Amarica-Boncalo (Politehnica University of Timisoara, Romania)

16:50 - 18:30

T14: Software Development for Measurement and Instrumentation Support

Room: Room B

Chair: Annamária R. Várkonyi-Kóczy (Óbuda University, Hungary)

A Common Platform for Bridging Pre- And Post-Silicon Verification in Mixed-Signal Designs1584

Dominik Widhalm (University of Applied Sciences Technikum Wien, Austria)
Stefan Tauner (University of Applied Sciences Technikum Wien, Austria)
Martin Horauer (University of Applied Sciences Technikum Wien, Austria)
Achim Schumacher (Infineon Technologies Austria AG, Austria)
Alexander Hagggenmiller (Infineon Technologies Austria AG, Austria)

Constant-Rate Clock Recovery and Jitter Measurement on Deep Memory Waveforms Using Dataflow1590

Yanzhou Liu (University of Maryland, USA)
Lee Barford (Keysight Technologies, Inc., USA)
Shuvra Bhattacharyya (University of Maryland, USA)

A Secure Software Framework for Measuring Instruments in Legal Metrology1596

Daniel Peters (Physikalisch-Technische Bundesanstalt (PTB), Germany)
Florian Thiel (Physikalisch-Technische Bundesanstalt (PTB) Berlin, Germany)
Michael Peter (Technische Universität Berlin, Germany)
Jean-Pierre Seifert (Technische Universität Berlin, Germany)

Flexible Software Solution for Rapid Manual and Automated Data Evaluation in ICP-MS1602

Heidi Fleischer (University of Rostock, Germany)
Martin Adam (University of Rostock, Germany)
Kerstin Thurow (University of Rostock, Germany)

Thursday, May 14th

09:05 - 10:50

SS7: Special Session 7: Instrumentation and measurements for Road Safety

Room: Auditorium

Chairs: Luca De Vito (University of Sannio, Italy), Luigi Ferrigno (University of Cassino, Italy)

An Automated System for Accident Detection.....1608

Asad Ali (New York University Abu Dhabi, UAE)

Mohamad Eid (New York University Abu Dhabi, UAE)

Smartphone Instrumentation for Insurance Telematics.....1613

Peter Händel (Royal Institute of Technology KTH, Sweden)

Isaac Skog (Royal Institute of Technology KTH, Sweden)

Martin Ohlsson (Royal Institute of Technology KTH, Sweden)

Jens Ohlsson (Movelo AB, Sweden)

Selective Attentional Point-Tracking Through a Head-Mounted Stereo Gaze Tracker Based on Trinocular Epipolar Geometry.....1617

Su Hyun Kwon (LG Display Co., Ltd., Korea)

Min Young Kim (Kyungpook National University, Korea)

A Dual Step Energy Detection Based Spectrum Sensing Algorithm for Cognitive Vehicular Ad Hoc Networks.....1622

Leopoldo Angrisani (University of Naples "Federico II", Italy)

Domenico Capriglione (University of Cassino and Southern Lazio, Italy)

Gianni Cerro (University of Cassino and Southern Lazio, Italy)

Luigi Ferrigno (University of Cassino and Southern Lazio, Italy)

Gianfranco Miele (University of Cassino and Southern Lazio, Italy)

09:05 - 10:50

T9-2: Measurement, Instrumentation, and Methodologies for Medical, Biomedical, and Healthcare Systems

Room: Room C

Chair: Francesco Lamonaca (University of Calabria, Italy)

A Preliminary Study on a Method for Objective Uniformity Assessment in Diagnostic Ultrasound Imaging.....1628

Andrea Scorza (Roma TRE University, Italy)

Giulia Lupi (Roma TRE University, Italy)

Salvatore Andrea Sciuto (Roma TRE University, Italy)

Luigi Battista (General Hospital "F. Miulli", Italy)

Jan Galo (IRCCS Children Hospital Bambino Gesù, Italy)

Measurement of the Pupil Responses Induced by RGB Flickering Stimuli1634

Mario Bernabei (University of Modena and Reggio Emilia, Italy)

Luigi Rovati (University of Modena and Reggio Emilia, Italy)

Lorenzo Peretto (University of Bologna, Italy)

Roberto Tinarelli (University of Bologna, Italy)

Smart Transducer Interfaces Applied to Health Monitoring1640

Vítor Viegas (Polytechnic Institute of Setubal, Portugal)

Jose Costa Pereira (Polytechnic Institute of Setubal, Portugal)

Pedro Silva Girão (Instituto Superior Técnico, Portugal)

Gabriela Postolache (Instituto de Medicina Molecular, Portugal)

Octavian Adrian Postolache (Instituto de Telecomunicações & ISCTE-IUL, Portugal)

A Distributed Measurement System for Dermoscopic Analysis of Pigmented Skin Lesions1646

Giuseppe Di Leo (University of Salerno, Italy)

Alfredo Paolillo (University of Salerno, Italy)

Antonio Pietrosanto (University of Salerno, Italy)

Paolo Sommella (University of Salerno, Italy)

Gabriella Fabbrocini (University Federico II of Naples, Italy)

Sara Cacciapuoti (University Federico II of Naples, Italy)

09:05 - 10:50

T1-1: Advances in Instrumentation and Measurement Developments and Techniques

Room: Room D

Chair: Consolatina Liguori (University of Salerno, Italy)

Enhanced ADC Sine Wave Histogram Test1652

Solomon Max (LTX-Credence Corporation, USA)

Richard Liggiero (LTX-Credence Corporation, USA)

Self-compensating Networks for Four Terminal-Pair Impedance Definition in Current Comparator Bridges1658

Luca Callegaro (INRIM - Istituto Nazionale di Ricerca Metrologica, Italy)

Vincenzo D'Elia (INRIM - Istituto Nazionale di Ricerca Metrologica, Italy)

Faranak Pourdanesh (INRIM - Istituto Nazionale di Ricerca Metrologica, Italy)

Bruno Trinchera (INRIM - Istituto Nazionale di Ricerca Metrologica, Italy)

Jan Kucera (CMI - Czech Metrology Institute, Czech Republic)

Massimo Ortolano (Politecnico di Torino, Italy)

Analyzing Numerical Optimization Problems of Finite Resolution Sine Wave Fitting Algorithms1662

Balázs Renczes (Budapest University of Technology and Economics, Hungary)

István Kollár (Budapest University of Technology and Economics, Hungary)

Paolo Carbone (University of Perugia, Italy)

Antonio Moschitta (University of Perugia, Italy)

Vilmos Pálfi (Budapest University of Technology and Economics, Hungary)

Tamas Virostek (Budapest University of Technology and Economics, Hungary)

High-Accuracy Frequency Estimation in Compressive Sensing-plus-DFT Spectral Analysis1668

Matteo Bertocco (University of Padova, Italy)

Guglielmo Frigo (University of Padova, Italy)

Claudio Narduzzi (University of Padova, Italy)

09:05 - 10:50

T6-2: Measurement Applications

Room: Room E

Chair: Serge Demidenko (Massey Universit, New Zealand)

Forest Intrusion Detection System with Sensor Network1672

Bence Koszteczy (University of Pannonia, Hungary)

Gergely Vakulya (University of Pannonia, Hungary)

Gyula Simon (University of Pannonia, Hungary)

Gesture-based Universal Optical Remote Control: Concept, Reconstruction Principle and Recognition Results1677

Heinrich Ruser (Bundeswehr University Munich, Germany)

Szymon Koterski (Bundeswehr University Munich, Germany)

Christian Kargel (Bundeswehr University Munich, Germany)

SPICE-Based Dynamical Model of a NTC Thermoresistive Sensor for Anemometer Applications1682

Leonardo de Araujo (Federal University of Rio Grande do Norte, Brazil)

Sebastian Yuri Cavalcanti Catunda (Federal University of Rio Grande do Norte, Brazil)

Diomadson R Belfort (Federal University of Rio Grande do Norte, Brazil)

Matthieu Denoual (ENSICAEN, France)

Raimundo Freire (Universidade Federal de Campina Grande - PB, Brazil)

Tightly Coupled Integration of GPS and AC Magnetic Positioning Systems1687

Guido De Angelis (University of Perugia, Italy)

Alessio De Angelis (University of Perugia, Italy)

Valter Pasku (University of Perugia, Italy)

Antonio Moschitta (University of Perugia, Italy)

Paolo Carbone (University of Perugia, Italy)

09:05 - 10:50

T3-2: Energy and Power Systems

Room: Room B

Chair: Andrew Roscoe (University of Strathclyde, United Kingdom)

Asynchronous Harmonic Analysis Based on Out-of-sequence Measurement for Large-scale Residential Power Network1693

Youda Liu (Tsinghua University, P.R. China)

Xue Wang (Tsinghua University, P.R. China)

Yanchi Liu (Tsinghua University, P.R. China)

An Experimental Energy Set-Up for Wireless Battery Recharging1699

Leopoldo Angrisani (University of Naples Federico II, Italy)

Guido d'Alessandro (University of Naples Federico II, Italy)

Mauro D'Arco (University of Naples Federico II, Italy)

A Battery Equivalent-Circuit Model and an Advanced Technique for Parameter Estimation1705

Gianluca Aurilio (Second University of Naples, Italy)

Daniele Gallo (Second University of Naples, Italy)

Carmine Landi (Second University of Naples, Italy)

Mario Luiso (Second University of Naples, Italy)

Aniello Rosano (Second University of Naples, Italy)

Marco Landi (University of Salerno, Italy)

Vincenzo Paciello (University of Salerno, Italy)

Open-Circuit Voltage Measurement of Lithium-Iron-Phosphate Batteries1711

Federico Baronti (University of Pisa, Italy)

Walter Zamboni (University of Salerno, Italy)

Roberto Roncella (University of Pisa, Italy)

Roberto Saletti (University of Pisa, Italy)

Giovanni Spagnuolo (University of Salerno, Italy)

11:10 - 12:50

T8-1: Measurement Systems and Theory

Room: Auditorium

Chair: Chi-Hung Hwang (Instrument Technology Research Center, Taiwan)

An Inverse Problem Approach to Approximating Sensor Data in Cyber Physical Systems1717

Paul O'Leary (University of Leoben, Austria)

Matthew Harker (University of Leoben, Austria)

Christoph Gugg (University of Leoben, Austria)

Uncertainty Propagation Through Non-Linear Measurement Functions by Means of Joint Random-Fuzzy Variables1723

Alessandro Ferrero (Politecnico di Milano, Italy)

Marco Prioli (Politecnico di Milano, Italy)

Simona Salicone (Politecnico di Milano, Italy)

Performance Comparison Between Expanded Uncertainty Evaluation Algorithms1729

Ye Chow Kuang (Monash University, Malaysia)

Melanie Po-Leen Ooi (Monash University, Malaysia)

Arvind Rajan (Monash University, Malaysia)

Serge Demidenko (Massey University, New Zealand)

Measurement Accuracy and Repeatability in Near-field Scanning Microwave Microscopy1735

Sijia Gu (IEMN - University of Lille, France)

Kamel Haddadi (IEMN - University of Lille, France)

Abdelhatif El Fellahi (IEMN - University of Lille, France)

Gilles Dambrine (IEMN - University of Lille, France)

Tuami Lasri (IEMN - University of Lille, France)

11:10 - 12:50

T9-3: Measurement, Instrumentation, and Methodologies for Medical, Biomedical, and Healthcare Systems

Room: Room C

Chair: Marco Parvis (Politecnico di Torino, Italy)

Comprehensive Study of Spectrum Occupancy for 802.11b/g/n Homogeneous Networks1741

Samer Rajab (Oklahoma University, USA)

Walid Balid (Oklahoma University, USA)

Hazem Refai (Oklahoma University, USA)

Reputation-driven Multimodal Emotion Recognition in Wearable Biosensor Network1747

Yixiang Dai (Tsinghua University, P.R. China)

Xue Wang (Tsinghua University, P.R. China)

Xuanping Li (Tsinghua University, P.R. China)

Pengbo Zhang (Tsinghua University, P.R. China)

Modeling of the Test Fixtures to Improve the HBC Channel Interpretation1753

Maicon Pereira (Federal University of Santa Catarina, Brazil)

Germán Álvarez-Botero (Federal University of Santa Catarina, Brazil)

Fernando Rangel de Sousa (Federal University of Santa Catarina, Brazil)

Energy Harvesting Wireless Sensors for Smart Home Applications1757

Péter Györke (Budapest University of Technology and Economics, Hungary)

Béla Pataki (Budapest University of Technology and Economics, Hungary)

11:10 - 12:50

T12-1: Sensors, Actuators, Transducers, and Sensor Fusion

Room: Room D

Chair: Gourab Sen Gupta (Massey University, New Zealand)

MEMS Gyro Vibration Immunity and its Measurement with TIRA Shaker1763

Yakov A. Nekrasov (ITMO University & Concern CSRI Elektropribor, Russia)

Svetlana V. Pavlova (ITMO University & Concern CSRI Elektropribor, Russia)

Nikolay V. Moiseev (State Research Center of the Russian Federation Concern CSRI Elektropribor, JSC, Russia)

Signal Conditioning of a Resistive Potentiometric Displacement Sensor with a Floating Slide1769

Srinivas Rana (Indian Institute of Technology Madras, India)

Boby George (Indian Institute of Technology Madras, India)

Jagadeesh Kumar V (Indian Institute of Technology Madras, India)

A Low-Power Interface Circuit for Piezoresistive Transducers.....1774

Achille Donida (University of Applied Sciences of Southern Switzerland (SUPSI), Switzerland)

Diego Barrettino (University of Applied Sciences of Southern Switzerland (SUPSI), Switzerland)

"Vibration Driven" Mechanical Switches: a Novel Transduction Methodology with Applications to DC-DC "diode-Less" Voltage Multipliers1779

Bruno Andò (University of Catania, Italy)

Salvatore Baglio (University of Catania, Italy)

Angela Beninato (University of Catania, Italy)

Felice Maiorca (University of Catania, Italy)

Carlo Trigona (University of Catania, Italy)

11:10 - 12:50

T13-2: Signal Processing Techniques

Room: Room E

Chair: Sergio Rapuano (University of Sannio, Italy)

Robust Recovery of Wideband Block-Sparse Spectrum Based on MAP and MMSE Estimator1783

Jia Li (Harbin Institute of Technology, P.R. China)

Qiang Wang (Harbin Institute of Technology, P.R. China)

Jiayan Qiu (Australian National University, Australia)

Cong Dong (Australian National University, Australia)

Compressed Sensing and Mobile Agent Based Sparse Data Collection in Wireless Sensor Networks.....1789

Qiang Wang (Harbin Institute of Technology, P.R. China)

Cuicui Lv (Harbin Institute of Technology, P.R. China)

Shen Yi (Harbin Institute of Technology, P.R. China)

Jinming Chen (Beijing Institute of Spacecraft Environment Engineering, P.R. China)

Accuracy of Sine-wave Frequency Estimation by an Iterative Interpolated DFT Algorithm1795

Daniel Belega (University of Timisoara, Romania)

Dario Petri (University of Trento, Italy)

Dominique Dallet (University Bordeaux, France)

Enhanced Optimization of the Wideband Excitation Signal for a Bioimpedance Measurement1801

Jaan Ojarand (ELIKO Competence Centre, Estonia)

Marek Rist (Tallinn University of Technology, Estonia)

Mart Min (Tallinn University of Technology, Estonia)

11:10 - 12:50

T3-3: Energy and Power Systems

Room: Room B

Chair: Carlo Muscas (University of Cagliari, Italy)

Remote Monitoring of Wind Direction on Overhead Transmission Lines Based on Fiber Bragg Grating1807

Guo-ming Ma (North China Electric Power University, P.R. China)
Jun Jiang (North China Electric Power University, P.R. China)
Qing Zheng (North China Electric Power University, P.R. China)
Cheng-Rong Li (North China Electric Power University, P.R. China)
Noel Nathan (North China Electric Power University, P.R. China)
Rui-duo Mu (Tianjin Electric Power Company, SGCC, P.R. China)
Kai Zhou (Beijing Electric Power Research Institute, P.R. China)
Kuan Ye (Beijing Electric Power Research Institute, P.R. China)

On the Use of Spectral Power Ratios for Partial Discharge and Noise Separation in Radiofrequency Measurements.....1813

Jorge Ardila-Rey (University Carlos III, Spain)
Ricardo Albarracín (University Carlos III, Spain)
Juan Manuel Martínez-Tarifa (University Carlos III, Spain)
Guillermo Robles (University Carlos III, Spain)

Introducing the Measurement virtual-eGateway for Domestic Energy Management.....1819

Stefano Rinaldi (University of Brescia, Italy)
Paolo Ferrari (University of Brescia, Italy)
Alessandra Flammini (University of Brescia, Italy)
Angelo Vezzoli (University of Brescia, Italy)

Comparison Between Electrical and Pressure Measurements to Detect PEM Fuel Cell Flooding1825

Roberto Ferrero (University of Liverpool, United Kingdom)
Giovanni Dotelli (Politecnico di Milano, Italy)
Paola Gallo Stampino (Politecnico di Milano, Italy)
Saverio Latorrata (Politecnico di Milano, Italy)
Sergio Toscani (Politecnico di Milano, Italy)

13:50 - 16:00

TS1-2: Track Event 1: Measurements in Railway Systems

Room: Auditorium

Chair: Romano Giannetti (Universidad Pontificia Comillas, Spain)

Fast and Efficient Determination of Eigenfrequencies of Railway Systems1831

Hendriekus Smulders (Movares Netherlands, The Netherlands)
Harald Prins (Movares Netherlands, The Netherlands)

Analysis on the Effect of Return Current Harmonics According to the Properties of UM71 and TI21 Track Circuit1831

Jonghyen Baek (Korea Railroad Research Institute, Korea)
Hyeon Yeong Choi (Korea Railroad Research Institute, Korea)
Gonyop Kim (Korea Railroad Research Institute, Korea)
Chul Hong Park (Sungkyunkwan University, Korea)

Development of New HIL Architecture to Study High Speed Trains Dynamics on Full-Scale Test-Rigs.....1843

Benedetto Allotta (University of Florence, Italy)
Roberto Conti (Florence University, Italy)
Enrico Meli (Florence University, Italy)
Luca Pugi (University of Florence, Italy)
Alessandro Ridolfi (University of Florence, Italy)

Weigh in Motion Systems for Railway Vehicles: Performance and Robustness Analysis.....1849

Benedetto Allotta (University of Florence, Italy)
Pierluca D'Adamio (University of Florence, Italy)
Alice Innocenti (University of Florence, Italy)
G. Gaburri (University of Florence, Italy)
Lorenzo Marini (University of Florence, Italy)
Enrico Meli (University of Florence, Italy)
Luca Pugi (University of Florence, Italy)

Measurement and Simulation of a Ferroresonance Occurred in a Single-phase 25kV Electric Railway Feeding Network1859

Mingli Wu (Beijing Jiaotong University, P.R. China)
Shaobing Yang (Beijing Jiaotong University, P.R. China)

13:50 - 16:00

T6-3: Measurement Applications

Room: Room C

Chair: Marco Faifer (Politecnico di Milano, Italy)

M2M Communication Delay Challenges: Application and Measurement Perspectives1859

Joachim Fabini (Vienna University of Technology, Austria)
Tanja Zseby (Vienna University of Technology, Austria)

Ultrasound Based Positioning Using Time of Flight Measurements and Crosstalk Mitigation1865

Guido De Angelis (University of Perugia, Italy)
Alessio De Angelis (University of Perugia, Italy)
Antonio Moschitta (University of Perugia, Italy)
Paolo Carbone (University of Perugia, Italy)

A Simple and Effective Testbench for Quartz Tuning Fork Characterization and Sensing Applications1871

Graziella Scandurra (University of Messina, Italy)
Gianluca Cannatà (University of Messina, Italy)
Gino Giusi (University of Messina, Italy)
Carmine Ciofi (University of Messina, Italy)

Analysis of the Sensitivity of AC Magnetic Ranging Systems to Environmental Configurations1877

Valter Pasku (University of Perugia, Italy)
Alessio De Angelis (University of Perugia, Italy)
Marco Dionigi (University of Perugia, Italy)
Antonio Moschitta (University of Perugia, Italy)
Guido De Angelis (University of Perugia, Italy)
Paolo Carbone (University of Perugia, Italy)

Electrical Characterization of Inkjet Printed Conductive Traces Using LinuxCNC1883

Christoph Beisteiner (Johannes Kepler University Linz, Austria)
Robert Wallner (Johannes Kepler University Linz, Austria)
Bernhard G. Zagar (Johannes Kepler University Linz, Austria)

13:50 - 16:00

T8-2: Measurement Systems and Theory

Room: Room D

Chair: Aime' Lay-Ekuakille (University of Salento, Italy)

Measurement System for Thermoelectric Module1889

Tri Ayodha Ajiwiguna (Telkom University, Indonesia)

Abrar Ismardi (Telkom University, Indonesia)

Seo Kim (KIST, Korea)

Design, Calibration and Measurement Uncertainty Analysis of a Tension Measurement Test System1894

Hasan Goksenin Cetin (ASELSAN Inc., Turkey)

Gokhan Ozturk (ASELSAN Inc., Turkey)

Yanki Celebi (ASELSAN Inc., Turkey)

Ahmet Dindar (ASELSAN Inc., Turkey)

Building a Gonioreflectometer - a Geometrical Evaluation.....1900

Andreas Winkler (Johannes Kepler University Linz, Austria)

Bernhard G. Zagar (Johannes Kepler University Linz, Austria)

Flow Velocity Measurement by Cross-correlation with Tailored Modulation1906

Ziqiang Cui (Tianjin University, P.R. China)

Huaxiang Wang (Tianjin University, P.R. China)

Wuliang Yin (The University of Manchester, United Kingdom)

Wuqiang Yang (The University of Manchester, United Kingdom)

Microphone Calibration for the Measurement of Acoustic Transfer Functions1910

Thomas Wiesner (Johannes Kepler University Linz, Austria)

Bernhard G. Zagar (Johannes Kepler University Linz, Austria)

13:50 - 16:00

T2: Data Acquisition Systems and Real-Time Measurements

Room: Room E

Chair: Jacob Scharcanski (UFRGS, Brazil)

Phase Difference Measurement of Radio-Interference Signals with Low-Cost Devices1916

Gergely Zachár (University of Pannonia, Hungary)

Gyula Simon (University of Pannonia, Hungary)

Two-Stage Processing System for the Detection and On-Site Localization of Acoustic Emissions1921

Iago Búa Núñez (Universidad Carlos III de Madrid, Spain)

Julio E. Posada Roman (Universidad Carlos III de Madrid, Spain)

Jose A. Garcia-Souto (Universidad Carlos III de Madrid, Spain)

Internet-of-Things Infrastructure as a Platform for Distributed Measurement Applications.....1927

Elisa Spanò (University of Pisa, Italy)

Stefano Di Pascoli (University of Pisa, Italy)

Giuseppe Iannaccone (University of Pisa, Italy)

An Extension to IEEE Std. 1241 Sine Fit for Analog-to-Information Converters Testing1933

Pasquale Daponte (University of Sannio, Italy)

Luca De Vito (University of Sannio, Italy)

Sergio Rapuano (University of Sannio, Italy)

A Comparison Between FFT and MCT for Period Measurement with an ARM Microcontroller1938

Sabrina Guia (University of Beira Interior, Portugal)

António Espírito Santo (University of Beira Interior, Portugal)

Vincenzo Paciello (University of Salerno, Italy)

Francesco Abate (University of Salerno, Italy)

Antonio Pietrosanto (University of Salerno, Italy)

13:50 - 16:00

T1-2: Advances in Instrumentation and Measurement Developments and Techniques

Room: Room B

Chair: Claudio Narduzzi (Universita' di Padova, Italy)

Extended Performance Measurements of Scalable 6LoWPAN Networks in an Automated Physical Testbed1943

Artem Yushev (Offenburg University of Applied Sciences, Germany)

Peter Lehmann (Offenburg University of Applied Sciences, Germany)

Axel Sikora (Offenburg University of Applied Sciences, Germany)

Voicu Groza (University of Ottawa, Canada)

An Automatic Thermal Cycling Based Test Platform for Thermoelectric Generator Testing1949

Júlio Vêras (Federal Institute of Pernambuco, Brazil)

Bruno Willian de Souza Arruda (Federal University of Campina Grande, Brazil)

Débora Vieira (Federal University of Paraíba, Brazil)

Ewerton Melo (Federal University of Paraíba, Brazil)

Cleonilson Protasio Souza (Federal University of Paraíba, Brazil)

Implementation of a Wireless Battery Management System (WBMS)1954

Cody Shell (University of Oklahoma, USA)

Jacob Henderson (University of Oklahoma, USA)

Huibert A Verra (University of Oklahoma, USA)

John Dyer (University of Oklahoma, USA)

On-Wafer Probe Station for Microwave Metrology At the Nanoscale1960

Abdelhatif El Fellahi (IEMN - University of Lille, France)

Kamel Haddadi (IEMN - University of Lille, France)

Jaouad Marzouk (IEMN - University of Lille, France)

Steve Arscott (IEMN - University of Lille, France)

Christophe Boyaval (IEMN - University of Lille, France)

Tuami Lasri (IEMN - University of Lille, France)

Gilles Dambrine (IEMN - University of Lille, France)

Application of a Testing Platform to Characterize Dynamic Monitoring Systems for Distribution Grids1965

Abhinav Sadu (RWTH Aachen University, Germany)

Andrea Angioni (RWTH Aachen University, Germany)

Ferdinanda Ponci (RWTH Aachen University, Germany)

Antonello Monti (RWTH Aachen University, Germany)

16:20 - 18:30

T9-4: Measurement, Instrumentation, and Methodologies for Medical, Biomedical, and Healthcare Systems

Room: Auditorium

Chair: Octavian Adrian Postolache (Instituto de Telecomunicações, Lisboa/IT & Instituto Universitario de Lisboa, ISCTE-IUL, Portugal)

Digital Pathology: Identifying Spongiosis in Unstained Histopathology Specimen1970

Sanush Abeysekera (Monash University, Malaysia)
Nicholas Kar Wei Siew (Monash University, Malaysia)
Melanie Po-Leen Ooi (Monash University, Malaysia)
Sharifah Syed Hassan (Monash University, Australia)
Ye Chow Kuang (Monash University, Malaysia)
Serge Demidenko (Massey University, New Zealand)

ECG Monitoring Using Android Mobile Phone and Bluetooth1976

Samuel E. de Lucena (Unesp - Sao Paulo State University, Brazil)
Daniel Sampaio (Unesp - Sao Paulo State University, Brazil)
Benjamin Mall (Karlsruhe University of Applied Science, Germany)
Michael Meyer (Karlsruhe University of Applied Science, Germany)
Martin Burkart (Karlsruhe University of Applied Science, Germany)
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